

Abstract of the disclosure

This invention relates to a self-leveling and balancing vehicle which is composed of a base and a moving and driving mechanism installed on the base, wherein the moving and mechanism having two longitudinal moving seats 5 installed on the guiding rails fixed on the base, a connecting frame extending to connect the two moving seats and two sector gears installed on the two moving seats. A driving motor and a sensor are installed on the connecting frame, two level driving gears being installed on two ends of the driving shaft and engaged with the two sector gears, a balance gear box being installed on the driving shaft 10 and having an output shaft extending to the connecting frame and can be rotated freely, further two driven gears being installed on two ends of the output shaft and engaged with the racks fixed on the base. Once the vehicle running up or down a slope, the level sensor can start the driving motor automatically to drive the driving shaft to make the level driving gears can be rotated along the sector 15 gears to adjust the chair or platform on the connecting frame to level position, meanwhile the two driven gears installed on the output shaft can be rotated reversely with the driving shaft and moved forward or backward to make the moving and driving mechanism move simultaneously along the guiding rails to balance position.